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# Consumer's Buying Behaviour Towards Green Packaging in Finland

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## **ABSTRACT**

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Title Consumer Buying Behaviour Towards Green Packaging in

Finland

Year 2017 Language English

Pages 47 + 9 Appendices

Name of Supervisor Peter Smeds

The objective of this study was to investigate consumer behaviour in connection with functionality of green packaging. Based on three major functions of conventional package, the aim was to examine how consumer perceives ecological packaging in terms of ability to fulfill its functions.

In the first section of thesis, a theoretical review was discussed based on previous studies and researches in term of "green packaging" and "customer behaviour". The literature review was the background of the following empirical study.

After the literature review, the empirical study was executed. A questionnaire was designed based on previous theoretical knowledge, the data collection occurred within ten days among respondents from Vaasa University of Applied Sciences.

The online survey was conducted in Finland with 121 participants. IBM SPSS Statistic version 23 was used to analyse the collected data. The result suggested that both non-experienced and experienced respondents have positive evaluation towards ecological packaging in term of fulfilling its functions. However, there were some issues, which cause negative impacts on consumer perception, detected in the analysis.

To conclude, the suggestion for green marketers in further study. Besides contribution of the research, author was examined limitations, as well as the reliability and validity of study.

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## 1 INTRODUCTION

In the first chapter, the aim is to guide reader through four sections of study, which are background and motivation of thesis, objectives, methodology and structure of thesis. To summary the chapter, the four sections will respectively present the problem addressed in this study, the objectives of the study need to be achieved and the thesis structure explained.

## 1.1 Background and motivation of thesis

It cannot be denied that concept "green marketing" is trendy in various industries in different countries. According to Langerak et al. (1998), Ottoman (1998), Peattie (1992), Polonsky (1994), van Dam & Apeldoom (2016), the "green marketing" concept came from discussions based on basis assumption of perspectives about "sustainability". Following studies belonging to Sapna and Anupriya (2016), have indicated that the "green marketing" trendy is embraced various topics regarding consumer behaviour and green packaging.

In term of green marketing, Loucanova, Parobek & Kalamarova (2016) suggested companies to pay attention on to changes in consumer perception while deciding appropriate marketing strategy and packaging. The design of packaging changed approximately every 15 years in the past; furthermore, due to significant requirements towards environment, in packaging it is possible to disclose the practices of a company relating to nature and society (Palus, 2004; Supin, 2009; Pajtinkova-Bartakova &Gubinova, 2012).

To act against negative impacts on environment, the European Union began by Treaty of Rome (1958) with no specific information relating to environment issues; however, during each period, the Act and policy were issued to restrict problems associating to ecological issues as well as direct effort on green improvement in packaging areas. In the future, the European Commission has set particular objectives to increase capacity of recycling waste, package waste as well in order to encourage ecological friendly innovation in packaging fields.

Based on earlier knowledge, the ecological packaging has become a popular topic for a vast number of discussions in different industries and countries. At the University of Applied Sciences levels, there were previous researches have mentioned the relationship between green package and consumer behaviour. I recognized that the "customer behaviour on sustainable packaging" concept is quite familiar in academic research studies, but when I put this ecological concept in a particular aspect, it became slightly unfamiliar as a general concept. In this study, the author aim is to place green packaging in a relationship with its main functions; the customer behaviour toward ecological packaging's ability to fulfil the basis package functions will then be examined.

## 1.2 Objectives of thesis

The objective of this thesis is investigating the relationship between green packaging and customer buying behaviour in Finland. Furthermore, the thesis is going to discuss the factors influence consumer buying behaviour, as well. The thesis could be used as an updated market research result for broad audience, any individual who is interested in green industry; a foreign company that is ambitious for expanding to the Finnish market; or a local firm that is planning to develop its business strategy.

In order to fulfil the aim of thesis, the objective is divided into sub-questions. Based on three different main functions of packaging, sub-questions are listed below in order to bring specific view regarding how the customer perceived green packaging in association with how green packaging fulfil its functions.

- 1. What is customer's buying behaviour toward green packaging in protecting product quality?
- 2. What is customer's buying behaviour towards green packaging in relation to promoting the product?
- 3. What is customer's buying behaviour towards green packaging in providing convenience for consumers?

## 1.3 Structure of thesis

The study includes six chapters, which are Introduction, Green packaging, Consumer buying behaviour, Empirical study, Results of empirical study and Conclusion.

In the first chapter, Introduction, the study is introduced briefly in terms of back-ground of study, the set objectives and methodology as well as the structure of thesis. The second and third chapters are theoretical. The second chapter, Green Packaging, represents the definition of green packaging, its three major functions and then discusses impacts of packaging on environment as well as green movements during different time periods. The following chapter, Consumer Buying Behaviour, focuses on green behaviour in term of green needs, purchasing process and factors affecting consumer perception. The fourth chapter, Empirical Study, explains briefly the choice of the research method and the process of carrying out the research, as questionnaire building and data collecting. The results of research are gathered and analysed in the following chapter, Result of Empirical Study. Finally, in Conclusions chapter, previous finding in the fifth chapter are briefly presented, then based on the analysis, discussed suggestion for further study in green packaging fields, limitations as well as reliability and validity of the study are introduced.

## 2 GREEN PACKAGING

Packaging, in general term, is a container directly in contact with a product, performing these functions: protection, hold, preservation, facilitation, identification as well as commercialization (Vidales Giovannetti, 1995). Or in marketing terms, packaging is defined as the form part of a product, as well as, a product's brand. According to Palmer et al. (2000), packaging is a primary element of consumer's experience with product and also an essential tangible factor of any product, besides being a quality element; or according to Underwood et al. (2001), in term of food industry, it is the most important external values in consumer purchasing decision.

In tandem with significant economic development, human awareness about greenrelated issues has been increasing steadily over the past two decades and the public is starting to acknowledge the influences on their lives and they are beginning to act against environmental changes. Green marketing was born as demand and effort of the public to arise in response to concerns about global environment and life (Pettie, 1992); this new style of marketing appeared to criticizes marketing and incentives of consumer requirements as a major sector of unsustainable growth. Besides several elements, which lead to successful green marketing such as branding and labeling; this chapter is only going to discuss packaging as a primary aspect to minimize its impact on environment.

In green marketing terms, it is not that difficult to recognize that "green" value, which means less negative impacts on the environment; it is the major effort of every marketer, as well as company, to add into their brand. According to Martin and Schouten, a sustainable brand is only able to exist when it is represented honestly in products and practices; one of important marketing mix aspects is packaging (Martin & Schouten, 2012). Furthermore, green packaging is a promise as well as practical evidence from a company for their green value that leads packaging to a particular attention of sustainable concern. The reasons partly came from that packaging offers chances in ameliorating the environmental influence of tangible goods without any altering in the core product (Peattie, 1992).

The Sustainable Packaging Coalition (SPC), which is a non-profit organization equips business resources and sciences to enhance sustainable products through an environmental packaging vision, it gives a specific definition to green packaging as a physical design optimizing energy and material, made from healthy material throughout life-cycle and recovered and utilized effectively in industrial or/and biological closed loop-cycle.

The word "green" hinders under itself various interpretations by different interest groups; the media defines green packaging with reducing overflowing landfills and global warming, the manufactures equate about decreasing carbon footprint as well as saving materials with the term, whereas, customer thinks "green" as less packaging, or as recycling packaging. However, even if there are diversified perceptions of what "green packaging" is about, the consumer is still one who controls the decision whether he/she buys or not; so that the less sophisticated the company environmental platform, the more connection in the minds of the customer about product packaging.

## 2.1 Functions of green packaging

According to various studies from different researchers, packaging's function has been defined as consisting six key roles: protection, rationalization, economic, guarantee, communication and ecological function (Zeman, 2001; Kacenak, 1996); or Dzurova (1997) based on previous research of Schulte have listed protection, transport, handling, information and storage as five major functions of packaging. However, in this section, I am going to use later definition of Zeman (2005) and Kacenak (2001): protection from possible damage, providing promotional and informational function as well as convenience to customer.

## 2.1.1 Protecting product quality

According to Palmer (2000), the product function of packaging is ensuring the product's sound condition during the transporting process to consumer, as well as, protecting the product from breakage and deteriorating. Manufacturers requires sturdy packaging to protect the product's content form buyer abuse and physical

damage, as well as supple outside layout of commodity to withstand artificial lights and climatic extremes at all times (Kassaye and Verma, 1992). Ecological package has been expected to be less harmful to the environment by reducing layers of packaging, shrinking package size or alternating old material using ecofriendly resources. However, besides of realizing the benefits of light weighted packaging, such as cutting-down manufacturing expenditure, promotional value and positive ecological influence; green packaging has received criticises and interrogation from consumers in terms of protect-function fulfilment. Therefore, once transferring into a "green" concept manufacturers need to continuously research and develops in order to fulfil the primary task of keeping their commodity safe from factory to the perceived buyers.

## 2.1.2 Promoting product

Packaging is a marketing tool, which makes a particular product outstanding among other commodities from various brands; moreover, the package can inform consumer crucial figures as well as have a promotional role (Palmer, 2000). According to Palmer (2000)'s studies, manufactures communicate with consumers directly (through brand name) or indirectly by attaching manufacture's brand, name and image with distinctive shape, type and colour of packaging. Toblerone chocolate brand serves as a concrete instance of a promotional role of packaging, instead of packing chocolate in a conventional flat box or typical wrapping paper, the manufacturer has chosen a box in a triangular shape so that buyers would easily recognize a bar of chocolate from Toblerone by its different package shape from other brands. According to Connolly and Davison (1996), buyers do not spend much time on logical thinking, as the research result estimated that a third of purchase decisions were made in the point of sale; therefore, packaging design has an extremely crucial role as s communication channel of a brand and further, directly or indirectly impacting on customer satisfaction (Rettie and Brewe, 2000). To conclude, attractive packaging plays a crucial role as a "speechless seller" for a commodity; so that, sustainable package needs to meet some particular conditions in possibility in attracting purchase intention (colour, design, shape), ensuring honesty of advertisement and informing of the essential characteristics of a product (storage conditions, elements of identification) (Domnica, 2010).

## 2.1.3 Providing convenience to customers

Beside the role above, the shape of packaging is considered as being conducive to stock convenience in different locations as on the shelves, at home andin office (Palmer, 2000). Furthermore, any particular packaging also needs to include specific information regarding the manufacturers and figures of the commodity, so that consumers are able to acknowledge entirely the perceived products as well as, get contact or report to the manufacturer in case of any appeared claims or declarations. In the food industry, to meet specific industrial requirements, fulfilling principal functions in safety as well as reducing harmful impacts on environment, food-covering packaging is strictly required to contain additional information relating to product identification, preparation, usage, nutrition date, storage date, product life and opening instructions. To conclude, besides fulfilling primary functions as protection and promotion, a packaging which is comfortable shape and includes all the essential information to convince any consumers, will become as a critical factor in the purchasing process and moreover, a key to the success of product marketing.

## 2.2 Packaging impacts on environment

It is ironic fact that when the Earth's age is more than four and a half billion years old and the humans just appeared for more than 4 millions years. However, the negative impacts of the humans on the Earth make our planet hurt and has destroyed more than any existing species ever did.

According to Pongrácz (1998), 170 kilograms of packaging per citizen were consumed in 1998; however the packaging waste reduced to 156.9 kilogram per inhabitant in 28 EU countries in 2013 regarding to a recent statistic of 28 EU Member States. In 1992, 33.9% of plastics' consumption came from European consumption for packaging objectives (British Plastics Federation, 1993) and in 2015, there was a steady decline in plastics consumption in the European countries, the

number of used plastics was around 58 million tonnes, accounting for 18% of global plastic consumption (Plastics Europe, 2016). The plastics waste has became to the public attention due to dramatically growing data about marine litter-the estimated number is more than 100,000 tons in 2013.

The poor generation and treatment of packaging waste and insufficient using of valuable resources has caused negative impacts on environment. Instead of recycling all waste, such as plastics, glass; packaging waste is sent straight to a landfill. According to Fishelson (1985), two major sectors of solid waste are scrapped durable goods and packaging waste, accouns for 33% of all household waste in the U.S (Stuller, 1990); whereas, packaging cost 34 billions U.S dollar in food and beverage industry (Johnson, Sommer and Mayes, 1985), so that the directly pouring of trash to landfill not only causes exhausted land but also wasting resources and money. After that, environmental performance becomes even worse when millions of tonnes of waste end up in the oceans and floating far away to pacific. Littering is one of things giving negative image to packaging and according to GESAMP, more than 80% of fragmentation in the Mediterranean is plastics, whereas, the percentage of plastics debris in the Pacific is up to 80% equalling to 269,000 tons of floating plastics on surface. When turtles, birds get tangled in plastic bags; floating debris threats abandoned marine species when they eat the fragmentation. Little by little, waste breaks out into tiny plastic pieces called micro-plastics which can soak up endocrine disruptor and chemical additives. These particles are eaten by, for example fish; and then end up right on our plate though our food chain.

## 2.3 Green movement in packaging

Environmental concerns have risen to the top of national issues in just a few short years; until 1970s, they actually rose to the surface and were responded to by the emerging "responsible consumption" concept plus various designed legislative initiatives in order to correct the environmental problems. "Friends of the Earth's" incorporation was born as one of the first efforts to response to natural bawl; the first action was recorded as 1.500 non-returnable bottles were dumped on the

Cadbury Schweppes's doorstep (Peattie, 1995). The period between mid 1970s to mid 1980s witnessed three significant document publications on the environment, which underlined the instant demand to tackle the increasing issues of environment. However, significant number of environmental events and disasters in the late 1980s was the reawakening that pulled environmentalism to a top issue again (Ottoman, 1995).

At European Union level, beginning by the Treaty of Rome (1958) with no particular information towards environmental issues; the Single European Act in 1987 recognized restricted problems regarding ecological issues and became one of the very first possibilities for the European Union to deal with sustainable areas. By 1993, direct effort on the green movement has been marked by the proposal European Union Directives in package areas; the major objective is minimizing packaging waste by reusing or recycling within five years by promises to cut down waste and actively recover or recycle packaging (Prendergast, Pitt and Berthon, 1997).

Since 2004, the giant Coca-Cola manufacturer has started focusing on innovating in packaging performance and quality, thus achieving the very first results in reducing package weight of PET-bottle by more than 16 percent. Addressing 3Rs principles at the core of innovation operation, in 2005, by co-funding with industry partners, Coco-Cola had released a pioneering PET bottle and then expanded recycling technology later, in 2011. Furthermore, the company began developing PlantBottle in 2009 and then, in 2015, officially launched PlantBottle and finally, has been recorded as the world's first PET bottle made from plant material entirely (Staff, 2016). Not only stopping at recycling and recovering the largest packing types- PET bottle, the giant producer also considered and took actions in reducing other material such as aluminium by "B-can" project.

Coca-Cola manufacturer is not the only company conscious at sustainable packaging issues, there are more and more companies also being aware of converting to ecological friendly packages. Taking more instances in the food industry, McDonald's had eliminated EPS clamshell by alternative eco-friendly paper-

board. The solution in packaging established a totally new category of paper-board, which are 30 percent lighter in weight than traditional paperboard; and especially, unbleached fiber means less chemical using and less processing (Smith, 2008). Or another transferring example from the cosmetics industry, for instance Neal's Yard Remedies from the UK replaced glass material by 100% PET plastics bottles in manufacturing products in its shower care and hair care lines; or Aveda lipstick using recycled aluminium material in its packing.

Overall, because of accelerating increase in alerted environmental issues, business, nowadays, has faced to various tough pressure and quickly adapting innovative strategy and alternatives to respond to the strict demands from consumers and society. The green movement in packaging, in generally, majorly focuses on ecological and sustainable solutions to reduce harmful material, ingredients in favour of green alternative resources.

## 3 CONSUMER BUYING BEHAVIOUR

#### 3.1 Green needs

"Needs" is a popular concept which have been clarified and illustrated by different researchers in various ways. Needs is defined as the basic requirement of humanity (Kumra 2007,51); a process that begins by describing a problem and then listing possible solutions for the appeared problem. Moreover, "needs" definition has been classified as a gap between "what is"- facing problem and "what should be"- possible solution (Witkin et al., 1995); or a gap between actuality and ideal (Reviere, 1996). Needs comes from various situations and under different forms and recognition of needs is activation of purchasing decision making process in order to gain some desired end stage (Martin & Schouten, 2012).

Whereas, conventional marketers put consumer needs at the center of marketing; marketers affectively place consumer's requirements in term of eco-friendliness and social consciousness in the core of any green marketing concepts (Ottoman, 2011). As previous studies have shown green awareness has risen since the 1970s; however, starting from the 1990s, the environment has become a hot critical issue and influenced entire producing and developing product process (Polonsky and Mintu-Wimsatt, 1995) and then has lead to a new chain of green-entrepreneurs who have attempted to meet eco-consumer's needs (Wang, 1991; Adam, 1990; Hardy 1990; Jay, 1990). The Western countries were seems like pioneers in green evolution (Olney and Bryce, 1991) when consumers of these countries have been inundated with ecological claims from various products. Following Western countries, emerging nations, such as India, Brazil, China, etc. have also recorded dramatic increases in environmental awareness of customers.

## Basic needs

Using ecological commodities when lack of modern products

# Safety needs

Needs for clean and healthy commodities

# Belongingness

Sustaining environment and society for relatives and friends

## Esteem needs

Status symbol, peer pressure

## Self-actualization

Moral obligation

Figure 1. Green needs adapted from Maslow's hierarchy of needs

Regarding the theories developed by Abraham Maslow, studies illustrate that humans are motivated to fulfil their basic needs before going on to higher-order motivations. The studies also successfully developed hierarchy of needs which embraces five stages from basic needs such as survival to advanced needs such as self-actualization. In the following studies, Ottoman (2011) and Martin & Schouten (2012) have adapted from Maslow's hierarchy of needs in order to figure out green needs of consumers based on popular hierarchy of needs. At the basic needs of survival and subsistence and further safety-stage, people not only recognize of the importance of clean supplying sources such as water, food; but also recognize the urgent actions in sustaining these providing systems. So that the motivates, which come from needs of living in a healthy and safe environment, have risen concerns about society and environment and encouraged people to consume ecological products as one of the best solutions in order to secure the well-being system for not only themselves, but also their children, friends and; furthermore, all existed species on the Earth. Being similar as any living creatures, human needs

belong in a group or a system and this motivation becomes fundamental to any well-being systems. Green products provide the consumer belongingness to a green social group or system; together with society, they are sharing humanity and their sense in community, globally and even with future generations. Moreover, in the next stage of Maslow's hierarchy, people desire to be different and valued; so that, besides of belongingness, green products also satisfy the esteem needs of people when bringing the achievement of being responsible and contributing to build a better environment. At the highest stage, self-actualization is understood as needs for better human being quality; consuming ecological products and service fulfills consumer's moral requirements to secure the society and the environment

## 3.2 Purchasing decision making process

A person is unique from each other; each independent person has one-of-a-kind characteristics, knowledge, background, motivations, and lifestyle, as well as reason fro purchasing different things when having the same needs. Even though, despite of different influencing factors which are indirectly or directly affecting in short-term or long-term, consumers still share a basic decision-making process (Shahzad, Zainab, Milad, Arman and Hossein 2013). Each person experiences a chain of mental processes embracing buying, using and disposing of a product; however, depending on level of involvement with the decision or the product, a person takes some steps out entirely; in general, the entire mental process is called consumer decision process (Martin & Schouten, 2012). In reality, the buying decision making process can be sophisticated due to various influencers and decision criteria, but the basic process is researched from different literature views, including five major steps.

## 3.2.1 Need recognition

At the first stage, a need triggers the buying process and motivates taking an action to eliminate the sense of deprivation. The need appears from the recognition of a consumer between the current state and the desired state by both internal and external stimuli. The consumer is able to feel the appearance of a specific motiva-

tions or problem, which needs to be solved, the recognition of a need can as well become an opportunities (Boone and Kurtz, 2005) or the resulting state is one of opportunity or need awareness (Solomon et al., 1999, 211). At this stage, marketers should carefully research customer needs based on kinds of needs or arisen problem to understand the customer's willingness and ability to purchase particular products (Kotler and Amstrong, 2006) as well as the consumer is crucial brand and products decision, so that marketers could characterize the target market (Foxall, Goldsmith and Brown, 1998, 26).

## 3.2.2 Information search

Once the entire decision-making process has been triggered, searching for information action will begin as a consequence of the previous stage. However, a consumer can or cannot look for any additional information in case of a strong consumer's drive or familiar products in routine repurchasing; a customer may skip this step entirely and purchase the product then (Kotler and Amstrong, 2006, 156).

On the other hand, if there is a greater number of uncertainty, the buyer will look for information by any relevant channels, through which the buyer can satisfy their needs. The following information sources are divided into four major categories. Personal resources embrace family, friends, relatives etc.; word-of-mouth recommendation from a close-relationship person is essential when a buyer has no previous purchasing experience, and even much more affective than conventional advertisement (Foxall, Goldsmith and Brown, 1998). If buyer has already purchased any products associating to the current needs, the experiential resource will come first in the searching process based on previous examining, handling and experiencing product (Palmer, 2000, 171). Thanks to the accelerating expansion of the Internet, there is a dramatic increasing in number of consumer turning to surfing the Internet for virtual information searching; this kind of public resource provides s abundant relevant information conveniently in just seconds. However, the Internet can sophisticate the searched information by misleading figures, which will cause false facts or images. The final resource is commercial source, which embraces advertising and promotion in all forms. However, consumers are

searching to control the world; so that, instead of only doing previous basic checking, consumers have done more at the shelf, they turn over product package to look for specific sustainable information and to consider the product performance more and manufacturer reputation as crucial elements in the purchasing product decision (Ottoman, 2011). To conclude, Kotler (1997) illustrated that each information resource plays a different roles in shaping the final purchasing decision and came up with a recommendation to marketer to carefully pay attention to identifying consumer's source of searching for information

## 3.2.3 Evaluation of alternatives

After gathering information, a buyer starts to re-evaluate all the figures to compare the satisfying levels of alternatives in term of identified needs. According to Shiffman and Wisenblit (2015), the evaluation process involves more steps than the consumer perceives, because there are unconscious judgments make besides subjective evaluation relying on psychological aspects. During the process, the entire range of available product is filtered down gradually to a manageable rank for re-evaluation (Palmer, 2000) or the range is evaluated based on potential cost and benefits, as well as different features in the same product but from other brands (Martin and Schouten, 2012). In certain situation, buyers are precise and they use careful calculation and logical thinking in selecting; however, there is little effort or no evaluation happening at other times when consumers purchase on impulse and rely on intuition. Most of impulse situations could be result of a company's effort in external marketing events, campaign or activities. On the other hand, in terms of a green consumption, Peattie (1992) has pointed out that a green consumer may change behaviour at the very root, through re-evaluating process, the researcher figured out non-consumption and purchase avoidance behaviour have lead to solution (such as buying second-hand, borrowing, hiring and leasing) to cut down purchasing decisions among green consumers. Therefore, to meet the purpose of encouraging the purchasing process, marketers need to understand factor affecting consumer's intentions and natural relationship among those factor (Cubillo, Sanchez and Cervino, 2006), as well as finding out the actual

evaluating brand process of a purchaser from a consumer perception (Kotler, 2001).

## 3.2.4 Purchase decision process

Following the result of previous evaluating stage, consumers rank products based on their own criteria and then, generally, the final decision will address on the most preferred product. However, there are two additional factors appeared between the purchasing decision and the purchasing intention that could change the final decision entirely (Kotler, 1997, 196). Attitudes-from-others factor occurs when an important person has given his/her opinion about the final consumption; but the tendency of the factor depends on level of positive or negative feedback on consumer's choice, as well as the level of motivation regarding the other's opinion. The other factor relates to an unexpected situation; the factors actually appear as result of unpredictable situation, such as a negative change in the financial ability. Therefore, in terms of putting effort to predicting purchase behaviour, preference and purchasing intention are not totally consistent accurate and trustworthy. Furthermore, the decision process involves more than making decision to purchase or not, the process also includes entire necessary decision to complete the entire purchasing process as method of payment, delivery, etc. In term of sustainable marketing, according to attempting to cut-down usage of toxic material or increasing numbers activities supporting humanity or protecting wildlife, that leads the purchasing decision process becoming more complicated than ever when manufacturers seek more environmental sustainability (Martien and Schouten, 2012).

## 3.2.5 Post-purchase behavior

The consuming process does not end when the buyer picks the wallet to pay for the product; customers take the product away and satisfied or dissatisfied feelings will continued developing constantly after the sale. Consumer's knowledge, attitude and awareness become important elements creating the degree of loyalty in customers because the existing customers purchase more frequently than new one and especially, spready positive image of the brand via customers is the most ideal

promoting channel (Foxall, Goldsmith and Brown, 1998). In this stage, the buyers will experience satisfaction or dissatisfaction, the answer of consumer feeling lies on the level in relating to how close result between consuming expectation and the perceived experience (Priscilla, 1983, 394-404). The greater the gap between the manufacturer's claim and the perceived result, the larger the level of dissatisfaction (Kotler 1997, 19). Customer satisfaction is a golden key to building close relationships with customer and developing groups of loyal consumers.

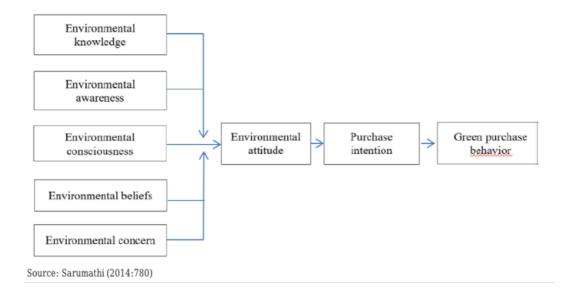
### 3.3 Factors influence consumer behavior

A common experience of purchase decision-making process from buyers does not mean that consumers will purchase the same product from the same brand at the same situation. Today, the buying process is becoming highly complicated and one of the reasons for a sophisticated purchasing process comes from varying in factors impacting on the customer's decision and behaviours toward particular product (Palmer, 2000) and the more constantly changing in individual consumer's activities and feeling, the more complex and dynamic the buying behaviour is (Perter and Olson, 2005, 6). Consumer behaviour has not only been portrayed as reflecting the process of how a specific buyers purchases a product; but also consisting more things regarding to the product such as services, ideas and brands (Hoyer and MacInnis, 2007, 3)

Typically, conventional buying behaviour is mainly affected by three major groups, which are psychological factors (motivation, perception), purchase situation (personal background, surrounding environment) and social factors (culture, reference group) (Weber and Villebonne, 2002). Green consumer behaviour will not be an exception, the three major group factors also rule basic behaviour and lead the consumer to follow typical purchasing behavioural stages (Peattie, 1995). On the other hand, according to Kataria et al (2013), during each behavioural stage, "green buyers" raise additional concerns, evaluation and comparisons relating to "greenness" of products; but in regard to studies, the increasing of difficulties in creating a correlation between consumer behaviours and consumer concerns, because purchasers who show positive attitudes towards sustainable issues,

do not demonstrate green consuming behaviour as a consequence (Gan et al., 2008).

Recently studies have revealed factors which have been listed as environmental knowledge, concern, belief, consciousness and awareness, are made use of exploring and assessing green behaviours as well as green purchasing decision (Sarumathi, 2014). Also in regard to research, Sarumathi (2014) pointed out natural relationship among influencing factors, purchase intention and buying behaviour.



**Figure 2.** Factors influencing green consuming behaviour

Environmental knowledge has been identified as a general comprehension of truths, conceptions and correlation of natural environment and its momentous ecosystem (Kaufmann et al., 2012). The majority of individual consumers do not acknowledge the importance of sufficient knowledge in associating to environment in order to sustain a balanced ecosystem. Environmental knowledge comes from two sources: education and self-experience to understand basic influence on environment (D'Souza et al, 2006). In regard to environmental knowledge, Hischman (1980), Machaud and Llerena (2011) and Laroche et al. (2001) have assessed that the more knowledge relating to environment issues, the more spending on green commodities. A sustainable consciousness describes making more decision regarding the promoting and preserving the natural environment as well

as sustaining welfare society for the future; whereas, environmental awareness is clarified as recognition of the influence caused by humans on nature and encouraging social consciousness to prevent toxic affect (Carrete et al., 2012, 472). A consumer, who posses typical ecological awareness and consciousness in associating to green concerns, is assessed as having more possibility to exhibit perception towards sustaining ecosystem, as well as being inclined to purchase eco-friendly products as a specific category (Kim, 2011). Even though green concerns have a strongly positive effect on consumer's approach towards green lifestyle and encourage buyers to be more inclined to use ecological commodities (Gan et al., 2008); according to Agyeman (2014), concerns relating to environmental issues are not necessarily associated with buying behaviour as well as considered in the buying decision-making process. The belief demonstrates thought on particular features of commodity in negative or positive aspects and plays crucially role in final purchasing decision of consumer (Kotler, 2005, 274-275; Jobber, 2007, 136; Karunakaran, 2008, 63-65). To conclude, environmental attitude, has been influenced by ecological knowledge, awareness, consciousness, concerns and belief, which may shift into a plan of performing an activity (Kataria et al, 2013) and define intention to behave in a particular situation (Kaufmann et al, 2012).

## 4 EMPRICAL STUDY

#### 4.1 Research method

Two research methods used in this study are literature review and quantitative research.

Firstly, literature review was considered essential for this study due to various reasons. Literature review illustrates and helps to understand the fundamental, controversial and neglected issues and topics, which have been discussed. It also is able to position the study within the context, as well as, construct the empirical research associating to theoretical framework.

Secondly, the quantitative method is chosen for this study based on its basis function in measurement of amount and quantity (Kothari, 2004). Among observation, experimentation and survey, which are three major methods to collect primary data (Samarhan, 1994); is survey as the method to collect and gather data. The questionnaire is built regarding to the context of thesis about buying behaviour, attitude and consciousness toward green packaging. The questionnaire is implemented in different ways, via mail, phone, as an interview and so on, because the larger amount of respondents, the more reliably the study-result reflecting the actual market.

To sum up, because of the above reasons, I strongly believe quantitative research and literature review are reasonable for this study.

## 4.2 Questionnaire building

As mentioned above, a questionnaire survey is chosen as form of quantitative research. The questionnaire includes three sections, which are background information, general consumer perception towards green values and consumer perception towards green packaging function. The survey begins with five demographic questions in order to identify the respondents and map them into different groups. The second section examines level of awareness regarding general green values. Finally, in the third part, focus is on investigating perception toward green pack-

aging. Questions are divided into three categories in order to examine consumer attitude on ability of green packaging in fulfilling three major functions: protection, promoting and convenience. The final question is an open question to test the opportunity that consumer recommends green packaging to others based on their satisfaction and reliability for eco-friendly package.

Demographic questions are designed as drop-out question, so that respondents were able to choose the answer from selected values. In section II and section III, in order to fulfill objectives in evaluating customer perception towards green issues, the answer to each question is the consecutively "Strongly agree", "Agree", "Neutral", "Agree" and "Strongly agree". Based on evaluation by an individual respondent, consensus levels on different statements will be chosen in the ways that match the answer.

The questionnaire is designed in the English language and in the ways that are simple and easily to understand. The entire questionnaire survey is presented in Appendix 2

## 4.3 Data collection

The questionnaire was designed under as an online version. For the online questionnaire, E-lomake browser was chosen as the based application for an online questionnaire. E-lomake is a useful tools for publishing e-forms to respondents, the collected data from E-lomake is possible to transferred into various statistic software such as SPSS or Excel.

The data was collect within ten days from 13<sup>th</sup> October 2017 to 23<sup>rd</sup> October 2017. The thesis supervisor, Mr. Peter Smeds, first, examined the questionnaire. After that, the online questionnaire was sent to respondents from Vaasa University of Applied Sciences via email. By clicking the provided link, the respondent could start answer the questionnaire easily. The answer of each respondent would be automatically transferred to the E-lomake database by clicking the "save" button after finishing answering all the questions.

## 4.3.1 Result analysis

After collecting primary data, the analyzing data process begins based on the objectives of the thesis. As mentioned above, the primary data was collected using online survey and a paper questionnaire, so that a decision was made to gather entire data under an Excel file in order to fulfill the analyzing purposes. The paper questionnaires was checked carefully, encoded and then entered manually into the IBM SPSS Statistic version 24 to analyze. SPSS Statistic is professional software used for logical statistical analyzing; it is a well-known program for analysis in various fields such as social sciences, market researches, and entrepreneur survey. Therefore, I believe that the SPSS Statistic program is powerful tool used in the empirical process of the study.

## 5 RESULT OF EMPRICAL STUDY

The number of respondents to he survey was 121 in total. Regarding consideration on valid responses all 121 were used for analysis. A valid response must be answered entirely without any questions left blank. In this chapter, the demographic characteristics of the all responses will be analysed general attitudes regarding green values, then the focus on investigating customer behaviour towards functions of green packaging will be examined. When analysing the customer behaviour on the functions of green packaging, I am, on the passive as before, going to dissociate sample based on their experience in using green packaging. The responses from experienced persons gave the exact evaluations based on actual practical contact with green packaging; whereas, non-experienced respondents gave an overview about their perception, evaluation and expectation on green packaging. After that, regarding to the ability the experienced respondents to recommend green packaging to others of experienced respondents, the sample will be separated into two groups, which are satisfied respondent group and dissatisfied respondent group, in order to analyse factors effect on customer satisfaction. The analysis process regarding to customer behaviour towards functions of green packaging, is illustrated in Figure 3:

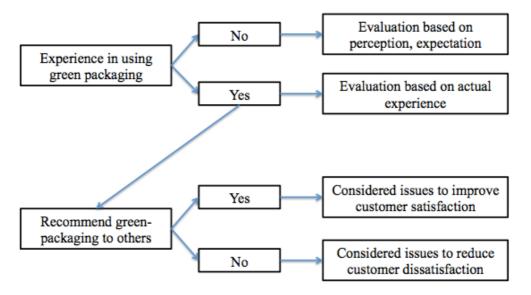


Figure 2. Analysing process

In section II and section III of the survey, the objectives of the research are to investigate general attitudes on green values and specific behavior towards functions of green packaging. The answers in section II and section III are designed as "Strongly disagree/ Disagree/ Neutral/ Agree/ Strongly agree". Because SPSS Statistic program requires numeric data to fulfill the analysis; so a five-level scale needs to be encoded as 1-5 number, which represents the selected level of a respondent's answer. Number 1, 2, 3, 4 and 5 represent consecutively "Strongly disagree", "Disagree", "Neutral", "Agree" and "Strongly agree" answer. It was determined that answers encoded from 1 to 3 are negative value; whereas, the answers encoded 4 and 5 are positive value. Therefore, the mean value, gained from SPSS Statistic version 23 software, smaller than 3 will be proceed as negative, and is greater than 3 will be proceed as positive.

## 5.1 Demography

According to Table 1, there is a relatively good balance between "Male" and "Female" respondents. There were 52 males, out of 121 respondents and accounting for 43,0% of the entire sample. So that, there was no significant difference in the amount of female respondents; 69 females anticipated in this survey and account for 57,0% of the entire sample. Therefore, the result points out that the survey was carried out by both genders equally.

Gender							
					Cumulative Per-		
		Frequency	Percent	Valid Percent	cent		
Valid	Male	52	43,0	43,0	43,0		
	Female	69	57,0	57,0	100,0		
	Total	121	100,0	100,0			

**Table 1**. Gender of respondents

As shown in Table 2, respondents from 18 to 24 years old accounted for the most significant proportion (53,7%) of all respondents. The respondent from age of 25 to 34 years old was following by 26,4%, while the number of participants from age group of 35 to 44 years old, 45 to 54 years old and 55 to 64 years old were

recorded sufficiently smaller and were 17, 6 and 1 respectively. Furthermore, there was no participant from age group of 65 and above.

Table 3 illustrates that the largest proportion (53,7%) on sample was respondent, who have a Bachelor's degree, followed by participants graduated from high school or holding a vocational qualification, the number of respondents in this educational level group was 42 persons and accounted for 34,7%. There were only two respondent have finished secondary school, accounting for 1,7% and 12 participants who held a master's degree and above, accounting for 9,9%.

The annual income of the respondents was shown in Table 4, 70 respondents (account for 57,9%) answered that their annual income are less than 10 000EUR, whereas, 32,2% of sample disclosed that their salary fell between 10 000EUR to 40 000EUR per year. Only 9,9% of respondents (equals 12 persons) said that they earn 40 000EUR to 80 000EUR annually; while there was no respondent with annual income falling into the higher salary range of above 80 000EUR.

Age								
	Frequency	Percent	Valid Percent	Cumulative Percent				
Valid 18-24 years old	65	53,7	53,7	53,7				
25-34 years old	32	26,4	26,4	80,2				
35- 44 years old	17	14,0	14,0	94,2				
45- 54 years old	6	5,0	5,0	99,2				
55- 64 years old	1	,8	,8	100,0				
Total	121	100,0	100,0					

**Table 2.** Age of respondents

#### **Educational levels**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary school	2	1,7	1,7	1,7
	High School/Vocational	42	34,7	34,7	36,4
	Bachelor's degree	65	53,7	53,7	90,1
	Master's degree and above	12	9,9	9,9	100,0
	Total	121	100,0	100,0	

**Table 3.** Educational levels of respondents

#### **Annual Income**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under 10 000EUR	70	57,9	57,9	57,9
10 000EUR- 40 000EUR	39	32,2	32,2	90,1
40 000EUR- 80 000EUR	12	9,9	9,9	100,0
Total	121	100,0	100,0	

**Table 4.** Annual income of respondents

## 5.2 General attitude of consumer regarding to green packaging

As shown in Table 5, fours questions regarding the general perception on green values were analysed by using mean value. Mean value is possible method to summarize the information in terms of observation by providing good approximation (Rao, Shi and Wu, 2014). Overview, all four statements gained a positive mean value. So, as the result has shown, the respondents have awareness, concern and knowledge of green issues.

The statement "I always purchase a green product in my daily shopping" gained 3,12 as mean value. This statement reflected the participant's "Environmental consciousness" and "Environmental concerns". A green consciousness is illustrate more chance to make a decision regarding the protecting the environment; whereas, green concern affects positively on consumer's approach towards eco-friendly commodities (Gan et al., 2008). Therefore, consumer's consciousness and concern regarding to green issues were evaluated positively. However, the mean value was not significantly greater than 3, which means environmental consciousness and

concerns do not play a notable role in affecting consumer's dealing with green commodities.

"I will switch to a different product if it is eco-friendly" and "I acknowledge different brands offering green products" received the corresponding value as 3,47 and 3,69. Ability in changing to other products based on positive or negative particular features, reflects consumer's "Environmental belief" (Kotler, 2005; Jobber, 2007; Karunakaran, 2008); while "Environmental knowledge" was identified via assessing information of consumer relating to various brands providing eco-friendly products; the more knowledge in term of green issues, the more spending on green commodities (Hischman, 1980; Machaud and Llerena, 2011; Laroche et al, 2001). Both "belief" and "knowledge" associating to environment gain a positive mean value, the distance from 3 to mean value was expanded; so that consumers have probable comprehension on green knowledge and green believes while purchasing.

"Environmental awareness" was reflected under statement "I am aware of benefit of green products on environment and human health". According to Carrete et al. (2012), environmental awareness is clarified as the recognition at the influence in nature and encouraging social consciousness to prevent toxic effects. The mean value reached 4,32- the highest mean value among the four statements, as well as, Std deviation value, which indicates quantified amount of dispersion of data values, the lower the Std deviation value the closer to the mean (Trochim, 2016). So, the majority of participants have agreed or strongly agreed that environmental awareness plays the most crucial role in their purchasing decisions also considerations relating to sustainable nature and human health were taken into consideration in the buying process.

General	consumer	nercention	towards	green value
General	CONSUME	Dercebuon	LUWAIUS	ureen value

	I always pur-		I will switch to	I am aware of benefit of
	chase green	I acknowledge dif-	different prod-	green products on envi-
	product in my dai-	ferent brands offer-	uct if it is eco-	ronment and human
	ly shopping	ing green products	friendly	health
Mean	3,12	3,69	3,47	4,32
N	121	121	121	121
Std. De-		072	4.040	700
viation	,976	,973	1,049	,798

**Table 5.** General consumer perception towards green value

## 5.3 Customer behaviour towards protecting product quality of green packaging

Out of 121 respondents, there were seven participants who disclosure that they have not used green packaging, accounting for nearly 6% of sample. As mentioned above, customer behaviour towards functions of green packaging based on their previous experience as well as ability to recommend sustainable packaging to others will be analyzed.

Have you ever used product in package that is less harmful to environment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	7	5,8	5,8	5,8
	Yes	114	94,2	94,2	100,0
	Total	121	100,0	100,0	

**Table 6.** Customer experience in using green packaging

The respondents who have never used green package, gave positive evaluation for using green material making product packaging. Non-experienced consumers expected that eco-friendly material, such as recycle materials and bio-degradable materials, also had none negative impact on product quality, protected product content well from contaminating as well as had a positive effect on nature. Furthermore, the mean value of statement "Packaging made using minimal material is lack of ability to keep product in the best quality" was 2,86; a less-than-3 value means that the respondents have made a negative evaluation about the protecting competence of a package made using minimal material. However, consumers who have not experienced green packaging, suspected the solidity of green package

and were uncertain while considering purchasing products be covered by packaging safe for human health and environment. The most negative value (2,43) belongs to statement "After using original product, I reuse green packaging many times". The consumer rejected reusing eco-friendly packaging and preferred consuming the original packaging of the product, instead of refilling packaging or recycling it.

Whereas, experienced consumers disclose that packaging made of green materials, such as bio-degradable material, well protected product quality from contaminating, ensured the best quality of the product, as well as the solidity of green material be guaranteed in order to prevent any factors caused damage. Also having the same attitude as non-experienced consumers, participants have used green packaging evaluated that package made using minimal material, such as one-cardboard-layer packaging, also has the ability to keep the best quality of product as normal package does. However, comparing to previous group, the experienced have chosen to reuse ecological packaging after using the original product by refilling or recycling it. Furthermore, opposing to non-experienced consumers who were refusing while choosing green packaging (mean value equals 3,00), the experienced consumers said that they will keep the habit of purchasing products packed by materials safe for human health (mean value equals 4,03 and Std deviation equals 0,734).

Custon	ner behaviour to	wards prote	cting produ	ct quality o	f green pacl	kaging
	Packaging			Packaging	I will pur-	
	made from			made us-	chase	One-
	green material	Packaging	After us-	ing mini-	product	cardboard-
	(i.e: recycle	made	ing origi-	mal mate-	that pack-	layer packag-
Have you ever	material, bio-	from eco-	nal prod-	rial is lack	aging	ing protects
used product	degradable	friendly	uct, I re-	of ability to	made	product from
in package	material) is	material is	use green	keep	from ma-	contaminating
that is less	also good as	solid as	packaging	product in	terial safe	well as multi-
harmful to en-	plastic pack-	plastic	many	the best	for human	layer packag-
vironment?	aging	one	times	quality	health	ing does
No Mean	3,29	3,00	2,43	2,86	3,00	3,14
N	7	7	7	7	7	7
Std. De- viation	1,113	,816	1,134	,690	1,155	1,464
Yes Mean	3,89	3,69	3,43	2,32	4,03	3,41
N	114	114	114	114	114	114
Std. De- viation	1,150	,997	1,160	,917	,734	,929

**Table 7.** Customer bahaviour towards protecting product quality of green packaging based on experience

The analysis continues focusing on participants who have dealt with green packaging before. There were nine consumers not willing to recommend ecological packaging to their relatives or friends, accounted for about 8%. However, 105 participants out of 114 experienced consumers said that they are pleased to introduce sustainable package for others.

Would you like to recommend your friends/relatives using green packaging in future?

Have you ever used product in package					Valid Per-	Cumulative Per-
that is less harmful to environment?			Frequency	Percent	cent	cent
No	Valid	No	2	28,6	28,6	28,6
		Yes	5	71,4	71,4	100,0
		Total	7	100,0	100,0	
Yes	Valid	No	9	7,9	7,9	7,9
		Yes	105	92,1	92,1	100,0
		Total	114	100,0	100,0	

**Table 8.** Recommendation for others

The experienced participants presented that their dissatisfaction came from suspecting the protecting ability of packaging made using minimal material. The Std deviations were respectively 0,527 and 0,788; so that majority of consumers require packaging manufacturer paying more attention on solidity as well as protecting ability of packaging made using minimal material. Besides of material issues, the consumers also refused to reuse green packaging after using all original products.

Customer behaviour towards protecting product quality of green packaging – Say Yes to recommence to others

		1000	mmence t	o others			
					Packag-	l will	
					ing	pur-	
					made	chase	One-
		Packaging	Packag-	After	using	product	cardboard-
		made from	ing	using	minimal	that	layer pack-
		green materi-	made	original	material	packag-	aging pro-
		al (i.e: recycle	from	product,	is lack of	ing	tects prod-
		material, bio-	eco-	I reuse	ability to	made	uct from
Would you	u like to rec-	degradable	friendly	green	keep	from	contaminat-
ommend	your	material) is	material	packag-	product	material	ing well as
friends/rela	atives using	also good as	is solid	ing	in the	safe for	multi-layer
green pac	ckaging in fu-	plastic pack-	as plas-	many	best	human	packaging
ture?		aging	tic one	times	quality	health	does
Yes	Mean	3,92	3,73	3,47	2,33	4,03	3,47
	N	105	105	105	105	105	105
	Std. De- viation	1,126	,966	1,155	,930	,772	,936

Customer behaviour towards protecting product quality of green packaging – Say No to
recommence to others

				Packag-	l will	
				ing	pur-	
	Packaging			made	chase	One-
	made from		After	using	product	cardboard-
	green mate-		using	minimal	that	layer pack-
	rial (i.e: re-		original	material	packag-	aging pro-
	cycle mate-		product,	is lack of	ing	tects prod-
	rial, biode-		I reuse	ability to	made	uct from
	gradable	Packaging	green	keep	from	contaminat-
	material)	made from eco-	packag-	product	material	ing well as
	is also good	friendly material	ing	in the	safe for	multi-layer
	as plastic	is solid as plas-	many	best	human	packaging
	packaging	tic one	times	quality	health	does
Mean	3,11	3,00	2,56	2,44	3,56	2,89
N	9	9	9	9	9	9
Std. Deviation	1,167	1,118	,882	,527	,726	,782

**Table 9.** Customer behaviour towards protecting product quality of green packaging based on ability to recommend to others

#### 5.4 Customer behavior towards promoting product of green packaging

The packaging not only used for protecting a product from external factors to keep the best quality, but also was a unique marketer helping to promote the product to consumers. The green packaging has made itself different due to its design, colour, size and shape. Whether consumers had previous experience or not, they could easily recognize the ecological product by its appearance. Green label was evaluated, as the first sign of a green product, so that experienced consumers seem quite familiar with some particular eco-label while purchasing. However, those whom have not used green packaging before, eco-label is probably not the first things came up to their mind while determining sustainable products. After using a product packed by ecological packaging, customers preferred benefits of packaging contributing to nature and human health; so that the higher price for sustainable products was affordable, as long as it is safe for human health and environment. However, "green benefit" on packaging was not actually attractive and affected on non-experienced customers. For the non-experienced

consumer, "green value" such as safe for the human health and eco-friendly material, was not the prior factor in their daily purchasing; other important features, such as product price played essential role in their purchasing process.

Customer behaviour towards promoting product of green packaging

	ilei bellavioui t	omarae pro	nothing product	t or groom pas	
		I think of			
	I recognize	green la-		I prefer	I would like to pay
Have you ever	green prod-	bel first	The product	products be-	more for product
used product in	uct by pack-	when	with green	cause of	that its packaging
package that is	aging color,	thinking of	packaging is	"green" ben-	is less harmful to
less harmful to	size, and	green	more attrac-	efits on	environment and
environment?	shape.	product	tive to me	packaging	human health
No Mean	3,14	2,71	2,43	2,57	2,57
N	7	7	7	7	7
Std. Devia- tion	,900	1,113	1,134	1,397	1,397
Yes Mean	3,58	3,32	3,49	3,54	3,32
N	114	114	114	114	114
Std. Devia- tion	1,063	1,101	1,007	,979	1,109

**Table 10.** Customer behaviour towards promoting product of green packaging based on experience

After experiencing sustainable packaging, the respondents disclosed that the design of the packaging was the major factor that made a product unique among different brands and manufacturers. However, the consumer was not completely convinced by other promoting methods, such as green benefits being described on packaging or eco-labelling. Furthermore, besides reading tons of green values on packaging, the consumers also paid most attention to the product price.

Customer behaviour towards promoting product of green packaging – Say Yes to recommence to others

		I think of			I would like to
	I recognize	green la-		I prefer	pay more for
Would you like to	green prod-	bel first	The product	products be-	product that its
recommend you	uct by pack-	when	with green	cause of	packaging is less
friends/relatives	aging color,	thinking of	packaging is	"green" ben-	harmful to envi-
using green pack-	size, and	green	more attrac-	efits on	ronment and hu-
aging in future?	shape.	product	tive to me	packaging	man health
Yes Mean	3,58	3,40	3,55	3,60	3,42
N	105	105	105	105	105
Std. Devia- tion	1,070	1,068	,954	,931	1,035

Customer behaviour towards promoting product of green packaging- Say No to recommence to other

		I think of			I would like to
	I recognize	green la-		I prefer	pay more for
	green prod-	bel first	The product	products be-	product that its
	uct by pack-	when	with green	cause of	packaging is less
	aging color,	thinking of	packaging is	"green" ben-	harmful to envi-
	size, and	green	more attrac-	efits on	ronment and hu-
	shape.	product	tive to me	packaging	man health
Mean	3,33	2,33	2,44	2,56	2,11
N	9	9	9	9	9
Std. Deviation	,866	,866	1,236	1,333	1,269

**Table 11.** Customer behaviour towards promoting product of green packaging based on ability to recommend to others

# 5.5 Customer behavior towards providing convenience to customer of green packaging

In term of providing convenience to consumer, green packaging was determined under aspects: fundamental information on packaging, reliability of packaging, preservation after using and flexibility. Both experienced and non-experienced consumers revealed that an eco-label is trustworthy because an ecological label is certified by an authorized organization based of set of standards. Furthermore, they evaluated preservation of sustainable packaging to be as good as a normal

one. Consumers have not faced any difficulty while opening the sustainable package; moreover, the packaging also was designed to re-disclose in order to preserve the quality of the product after use partial. Both consuming groups also positively evaluated the flexibility of a green package; they preferred packaging that can be refilled-used after using entirely content. As the most important functions of package, information regarding the contents, instruction and benefits in packaging was required being easy understandable and clear. According to the experienced participants, they strictly requested sufficient instructions about products, whereas the participant who have not used green packaging before, tend to pay attention on added ecological values on packaging, instead of detailed information about product. However, the description about the product on sustainable package was considered understandable and clear under evaluation of both non-experienced and experienced respondents.

Cı	ustomer be	eha	viour towards prov	iding con	venience to custo	mer of green	packaging
			I prefer purchas-				
			ing product that		I do understand		
			has enough in-		information re-		I would like
Have	you e	ver	formative instruc-		garding to con-	Green pack-	to purchase
used	product	in	tion on packag-		tents, instruc-	aging is	product in
packa	age that	is	ing, even the	Eco-	tions and benefit	easy to open	package that
less	harmful	to	package is green	label is	on green pack-	as well as	can be re-
envir	onment?		or not.	reliable	aging	re-close	filled
			0		د		
No	Mean		2,86	3,57	3,57	3,29	3,57
	Mean	∕ia-	2,86	3,57	3,57	3,29	3,57
	Mean N Std. Dev	∕ia-	2,86 7	3,57 7	3,57 7	3,29 7	3,57 7
No	Mean N Std. Dev	⁄ia-	2,86 7 ,690	3,57 7 1,397	3,57 7 ,976	3,29 7 1,254	3,57 7 ,787

**Table 12.** Customer behaviour towards providing convenience to customer of green packaging based on experience

The experienced respondents asked to recommend green packaging to their friends or relative, refused inviting others to using the ecological package due to reliability of the eco-label. The green-label had not completely convinced consumers about its contribution to environment as well as welfare society. Customers put a question mark on the accountability of eco-label as well as the certified standard of different eco-labels.

Customer behaviour towards providing convenience to customer of green packaging – Say

		Yes to recomr	nence to	otners		
		I prefer pur-				
		chasing prod-		I do under-		
		uct that has		stand infor-		
		enough in-		mation re-		I would
		formative in-		garding to	Green	like to
		struction on		contents, in-	packaging	purchase
Would yo	ou like to recom-	packaging,		structions	is easy to	product in
mend yo	ur friends/relatives	even the pack-	Eco-	and benefit	open as	package
using gre	een packaging in	age is green or	label is	on green	well as re-	that can
future?		not.	reliable	packaging	disclosure	be refilled
Yes	Mean	3,40	3,77	3,98	3,93	4,15
	N	105	105	105	105	105
	Std. De- viation	,901	,797	,677	,798	,715

 ${\bf Customer\ behaviour\ towards\ providing\ convenience\ to\ customer\ of\ green\ packaging\ -\ Say}$ 

	NO to	recommence to	otners		
	I prefer pur-				
	chasing		I do under-		
	product that		stand infor-		
	has enough		mation re-		I would
	informative		garding to	Green	like to
	instruction on		contents, in-	packaging	purchase
	packaging,		structions	is easy to	product in
	even the		and benefit	open as	package
	package is	Eco-label is	on green	well as re-	that can
	green or not.	reliable	packaging	disclosure	be refilled
Mean	3,00	2,78	3,78	3,56	3,11
N	9	9	9	9	9
Std. Deviation	1,000	,972	,667	,726	1,054

**Table 13.** Customer behaviour towards providing convenience to customer of green packaging based on ability to recommend to others

#### 6 CONCLUSION

#### 6.1 Summary of result

The result of empirical research were analysed based on 121 respondents answers. The aim of research was investigating consumer behaviour towards the functions of green packaging, which are protecting quality, promoting product and providing convenience. The demographic analysis suggested that the results be analysed based on individuals group from 18 years old to 44 years old, those with a Bachelor's degree or graduated from high school/vocational school diploma and earning less than 80 000EUR annually. Firstly, the analysis was analysed consumer behaviour based on their experience, then the behaviour of experienced respondents was examined via ability to recommend green packaging to others. Finally, the gathered analysis pointed out customer behaviour towards functions of sustainable package; so that, based on available analysis, it was possible to investigate factors affecting negatively on customer perception.

While examining consumer behaviour toward functions of sustainable package, the findings showed positive evaluation from both non-experienced and experienced participants relating to functions of protecting product quality, promoting product and providing convenience of ecological packaging. However, the research also pointed out features affecting on customer behaviours while considering green packaging in the purchasing process. For specific, in terms of protecting function, packaging made from minimal material were suspected not be solid enough to prevent contaminating and damage. Besides providing huge amount of benefit for the ecological value, consumers also consider price as an essential factor impacting on purchasing decision. Finally, reliability reflected trustworthiness; consumers were confused about the authenticity of information provided on package. The reliability of information on packaging was determined as an aspect impacting on customer behaviour in term of promoting and providing convenience to the consumer.

#### 6.2 Suggestion

Understanding consumer behaviour of a market is a crucial factor while an entrepreneur aims to achieve success in a new target market, so that academics and practitioners can take advantage of this research for other further studies. According to results from current research as well as other previous studies, the followed suggestions were listed, in order to help individual, business or institution aim to penetrate into the Finnish market.

The technical improvement is required to maintain and develop quality of packaging. Any ecological material used to make packaging must be ensured about the solidity. The solidity of material directly related to protecting ability as well as preventing contamination and damage during transportation. Manufacturers should remember that consumers would not certainly repurchase product packed by low-quality materials with add green benefit, instead of choosing a solid conventional packaging.

Green value definitely is not the only prior factor affecting on consumer behaviours. According to the study's analysis, a product added with ecological benefits on packaging should be considered offering under an affordable and competitive price. The competitive price, such as lower or the same price comparing to a conventional product's price, would be an advantage in attracting consumer to choose green product in the purchasing process. However, price strategy plan should be drawn up as long-term pricing strategy, which determines relationship among business profits, costs as well as the economic situation.

The consumer cannot immediately perceive added ecological information on packaging without any particular introductions or numeric measurement on how ecologically friendly a product is. Green practitioners should be extremely careful in any message that they aim to communicate with consumer. Any green facts sticking on packaging without evidence could possible cause negative damage on product image. The green marketers are suggested to keep transparency in their performance relating to Cooperated Social Responsibility. Furthermore, knowledge about an ecological label should be raised among consumers in order

to improve trustworthiness of the ecological label in consumer perception. The green marketers are recommended to introduce the ecological label via public communication channels, such as official website of the company and advertisement.

To conclude, the practices to raise public awareness of environment should be conducted regularly in order to introduce effect on consuming habits on environment as well as educate customers to reduce negative impacts on nature. The entrepreneurs can conduct campaigns by themselves or co-operate with other environmental organizations to launch marketing programs, which encourages green practices.

#### 6.3 Limitation

In analysis of demographic data, shows that the majority of respondents from age of 18 to 44 years old, have graduated high school or held a vocational qualification, or have completes a Bachelor's degree and have an income of under 10 000EUR to 80 000EUR. The limitation of study is that the sample does not reflected exactly entire Finnish market consuming behaviour as set in the research objectives. As previous investigation, I suggest that the result of thesis based on specific market segmentation, with the mentioned characteristics. The following studies should determine about subjects of study while using the result from this research.

#### 6.4 Reliability and Validity

Reliability and Validity have different meanings while placed under different method of researches, as Quantitative research and Qualitative research (Creswell, 2014). In this study, the author chooses the quantitative research as the method.

Validity, in other words, measurement to test the consistency of result while using in the same circumstance on repeated instances (Heale & Twycross, 2015). There are three elements significantly impact on validity of study: questionnaire design, questionnaire structure and accurate pilot testing (Saunders et al., 2012). In this study, the questionnaire was built based on theoretical knowledge. According to

analysed result shown, the final analysis of study was well supported to previous literature review. Moreover, the pilot test was executed after building the questionnaire in order to correct the occurred mistakes. As previous proof, the author believes that the validity of study is confirmed.

Reliability regarding to consistency of study, the reliability is assessed the homogeneity via using Cronbach's  $\alpha$ . Cronbach's  $\alpha$  is evaluated as one of the most common measurement to test the consistency of instrument. The result of measurement is number fall between 0 and 1; the acceptable score is greater than 0.7 (Heale & Twycross, 2015; Tavakol & Dennick, 2011)

Reliability Statistics					
Cronbach's Al-					
pha	N of Items				
,894	26				

 Table 14. Reliability Statistic

As Table 16 shows, the Cronbach Alpha is 0,894 which is quite a high value and much greater than 0,7. So, the reliability of the study is confirmed.

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# CONSUMER BEHAVIOUR TOWARDS GREEN PACKAGING SURVEY

I am Nguyen Hoai Anh, the fourth-year student at Vaasa University of Applied Science. The questionnaire is designed as part of my thesis in order to investigate consumer perception in green packaging field. I am very appreciated if you spend few minutes to participate in this survey by kindly answer below questions.

### Part I. Background information

1. Ge	nder:			
	Male □		Female	<b>=</b> _
2. Ag	e:			
	18-24 □	35-44 □	55-64[	
	25-34 □	45-54 □	65+ [	
3. Ed	ucational lev	el:		
	Secondary s	school		
	High Schoo	l/Vocational	School	
	Bachelor' d	egree		
	Master' deg	gree and abov	e	
4. An	nual income			
	Under 10 00	00EUR		

10 000EUR- 40 000EUR							
40 000EUR- 80 000EUR							
Above 80 000EUR							
5. Have you ever used product in paronment?	ackage that is les	ss ha	armi	ful t	o en	vi-	
Yes □ No □							
Part II. General consumer percep	tion towards gr	<u>een</u>	val	<u>ues</u>			
Please indicate your opinion about sessment:	following stater	nent	ts b <u>y</u>	y us	ing	as-	
1- Strongly disagree							
2- Disagree							
3- Neutral							
4- Agree							
5- Strongly agree							
		1	2	3	4	5	
I always purchase green product in	my daily shop-						
ping							
I acknowledge different brands	offering green						
products							
I will switch to different produc	t if it is eco-						
friendly							
				ı	, ,		

I am aware of benefit of green products on envi-			
ronment and human health			

## Part III. Consumer perception towards green packaging

Green packaging: package has less harmful impact on environment by using eco-friendly material, having less layer of material, reusing, recycling, refilling and so on.

Please indicate your opinion about following statements by using assessment:

- 1- Strongly disagree
- 2- Disagree
- 3- Neutral
- 4- Agree
- 5- Strongly agree.

	1	2	3	4	5
Protection function		I			
Packaging made from green material (i.e: recycle					
material, biodegradable material) is also good as					
plastic packaging					
Packaging made from eco-friendly material is sol-					
id as plastic one					
After using original product, I reuse green packag-					
ing many times					

Packaging made using minimal material is lack of			
ability to keep product in the best quality.			
I will purchase product that packaging made from			
material safe for human health			
One-cardboard-layer packaging protects product			
from contaminating well as multi-layer packaging			
does			
<ul> <li>Promoting function</li> </ul>			
I recognize green product by packaging color, size,			
and shape.			
I di al a Carra a 1.1.1 Carra 1.1.1 in a Carra			
I think of green label first when thinking of green			
product			
The product with green packaging is more attrac-			
tive to me			
I prefer products because of "green" benefits on			
packaging			
I would like to pay more for product that its pack-			
aging is less harmful to environment and human			
health			
<ul> <li>Convenience function</li> </ul>			
I prefer purchasing product that has enough in-			
formative instruction on packaging, even the pack-			

age is green or not.			
Eco-label is reliable			
I do understand information regarding to contents, instructions and benefit on green packaging			
Green packaging is easy to open as well as re- disclosure			
I would like to purchase product in package that can be refilled			

	Thank you	ı very	much!		
Yes □	No □				
packaging in future?					
Would you like to	recommend	your	friends/relatives	using	green